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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/309,868	09/21/1994	HIDENARI YASUI	28	6704

7590

08/21/2003

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EXAMINER
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SHERRER, CURTIS EDWARD

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
08/309,868

Applicant(s)

Yasui et al.

Examiner  
Curtis E. Sherrer

Art Unit  
1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Mar 17, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 7-16 is/are pending in the application.
- 4a) Of the above, claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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### **Part III DETAILED ACTION**

#### ***Election/Restriction***

The restriction (Paper #27) is withdrawn in light of applicants' traversal. The two independent processes recited in claims 11 and 12 are considered to represent members of a Markush group and will be examined as such.

This application contains claims 7-10 drawn to an invention non-elected with traverse in Paper No. 5. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (37 C.F.R. § 1.144) M.P.E.P. § 821.01.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 2, 5, and 13 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. (U.S. Pat. No. 3,591,491)(hereinafter "Smith") in view of Hei et al. (U.S. Pat. No. 5,484,549)(hereinafter "Hei") or Berndt (U.S. Pat. No. 5,520,888) or Kramer et al. (U.S. Pat. No. 5,215,554)(hereinafter "Kramer") for the reasons set forth in the last Office Action.

With regards to the limitations set forth in new claims 13 and 15, because the Markush member directed to ozonating separated sludge has been met (as found in the independent claims), it is considered that the new dependent claim limitations are fully met. Specifically, because one member of the Markush group is anticipated, any limitation directed to other Markush members are of no consequence as to patentability.

Claims 12, 14 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Smith in view of Hei or Berndt or Kramer and in further view of Dorau et al. (U.S. Pat. No. 5,362,395)(hereinafter "Dorau") for the reasons set forth in the last Office Action.

With regards to the limitations set forth in new claims 14 and 16, because the Markush member directed to ozonating separated sludge has been met (as found in the independent claims), it is considered that the new dependent claim limitations are fully met. Specifically, because one member of the Markush group is anticipated, any limitation directed to other Markush members are of no consequence as to patentability.

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Smith in view of Hei or Berndt or Kramer and in further view of Brock (Biology of Microorganisms, pp. 214 and 215) for the reasons set forth in the last Office Action.

Claim 4 is rejected under 35 U.S.C. § 103 as being unpatentable over Smith in view of Hei or Berndt or Kramer and in further view of Brock (Biology of Microorganisms pp. 202 to 204) for the reasons set forth in the last Office Action.

***Response to Arguments***

Applicant's arguments filed 09/30/02 have been fully considered but they are not persuasive.

It is first noted that all arguments directed to Markush members other than the ozonating of sludge are not found persuasive because they are not the member that is rejected over the prior art (see comments above).

Applicants argue that, while the prior art shows that interaction between pH and ozone stability is well known in the art, they have obtained unexpected efficient at a pH range of no more than 5. A review of applicants' specification show that ozone is more active at lower pH's and this would be expected. Applicants have provided no data, other than that which is generally graphed, to support a claim of unexpected results. It is noted that the pH scale represents a logarithmic change in the hydrogen ion concentration and therefore the requirement of using only half the ozone at pH 5 may or may not be unexpected. Those of ordinary skill in the art are going to optimize the pH so as to obtain the most benefit from the use of ozone.

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Applicants argue that Dorau fails to teach certain limitations (see bottom of page 6 of applicants' Response). In response to applicants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A copy of Sotelo et al., Ind. Eng. Chem. Res. 1987, 26 pp. 39-43 (the article cited to in Hei) is enclosed. Fig. 3 shows the influence of pH on ozone at pH levels of 2.5, 5, 7, 8, and 9.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until

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after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis Sherrer whose telephone number is (703) 308-3847. The examiner can normally be reached on Monday through Friday from 8:30 to 6:30. The fax phone number for this Group is (703)-305-3602.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

A handwritten signature in black ink, appearing to read 'C. Sherrer', with a long horizontal flourish extending to the right.

Curtis E. Sherrer  
Primary Examiner  
June 12, 2003